



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

A REMEDY FOR THE RISING COST OF LIVING STANDARDIZING THE DOLLAR

By IRVING FISHER

Yale University

This is the third meeting of the American Economic Association in which the problem of the high cost of living has been considered. Two years ago we considered the general principles which may explain the high cost of living, and last year we considered the plan for an international conference on the high cost of living. One of the many subjects which would come before such a conference would be the proposed remedies for price fluctuations.

My present purpose is to present, as one of these remedies, a plan to "standardize the dollar." I am not denying the importance of other remedies and do not claim to have found a panacea for all the ills associated with the "high cost of living." The remedy here suggested does not take the place of economies of production, nor does it concern itself with incomes and earning power. It aims merely to establish a more stable unit in which to measure all these things, to convert our dollar into a fixed yardstick of purchasing power.

In my address before the International Congress of Chambers of Commerce three months ago, I outlined the plan in a few words. Since then it has been so often misunderstood that I am taking this earliest opportunity to make a fuller statement of it. I must refer those desiring still fuller and technical details to the closing chapter of my *Purchasing Power of Money* and, more especially, to an article in the February number of the *Quarterly Journal of Economics*.

Briefly stated, the plan is to introduce the multiple standard, in which the unit is a "composite ton" or "composite package" of many staple commodities, not of course by using such a package in any physical way but by employing instead its gold bullion equivalent. In essence it would simply vary the weight of gold in the dollar or rather behind the dollar. The aim is to compensate for losses in the purchasing power of each grain of gold by adding the necessary number of grains of gold to the dollar.

Both on the basis of theory and of facts, we may accept as sound the principle that the lighter the gold dollar the less its purchasing power and the more magnified the scale of prices; and that the heavier the dollar the greater its purchasing power and

the more contracted the scale of prices. Evidently if we can find some way to increase the weight of the dollar just fast enough to compensate for the loss in the purchasing power of each grain of gold, we shall have a fully "compensated dollar," that is, a dollar which has constantly restored to it any purchasing power it may lose by gold depreciation.

We now have a dollar of fixed weight (25.8 grains), but varying purchasing power. Under the plan proposed, we should have a dollar of fixed purchasing power, but varying weight.

But how is it possible to have a dollar of varying weight without the annoyance of a constant recoinage of gold coin? Moreover, if this can be done, how can we know at any time what weight the dollar ought to have without leaving this to the tender mercies of some political official? Here are two very vital questions.

As a preparation for answering these two questions, it will be a little easier to explain the principle of the proposal if for a moment we assume that there are no actual gold coins in circulation, but only gold certificates. This supposition is, in fact, not very far from the truth in the United States; for, outside of California, there is very little actual gold coin in circulation. We have instead nearly a billion dollars of gold certificates in circulation, representing gold in the Treasury of the United States. We are supposing for the moment that gold circulates in no other way. Under these circumstances it is evident that the ultimate gold dollar is out of sight in the Treasury of the United States in bars of gold bullion. Every 25.8 grains of this gold bullion is a *virtual dollar* behind a dollar of gold certificates outstanding. A gold bar (of standard bullion) weighing 25,800 grains virtually contains 1000 gold dollars.

The gold miner takes such bars of standard gold to the mint and deposits them without waiting for their coinage, receiving gold certificates in return, one dollar of gold certificates for each 25.8 grains of standard gold which he deposits. On the other hand, holders of gold certificates may at any time receive gold bullion in return, when they desire this for export, or for use in the arts of jewelry, dentistry, gilding, etc., receiving 25.8 grains of gold for each dollar of gold certificates. Thus the government on demand gives or takes money at the rate of 25.8 grains of bullion per dollar; the virtual, though invisible, dollar being this 25.8 grains of gold bullion, nine tenths fine.

The proposal here made is to change the weight of the dollar as an offset to changes in value. If there are no gold coins, it is very easy to do this. For example, if there should be a decrease of 1 per cent in the value, that is, purchasing power of gold, then the weight of gold bullion which constitutes the virtual dollar would be declared 1 per cent greater, becoming 26.058 instead of 25.8. If there should be an increase in the purchasing power of gold, the weight of the virtual dollar would be reduced accordingly. Whenever the gold miner took gold to the mint, he would receive a gold certificate not necessarily at the rate of one dollar for each 25.8 grains of standard gold, but for a larger or smaller amount as the case might be, the amount always being that amount which would possess the same purchasing power. Similarly the holder of gold certificates who wishes them redeemed in bullion for export or for the arts, would not always get exactly 25.8 grains for each dollar of certificates, but a larger or smaller sum, as the case might be. Thus the government would be receiving gold from the miner and giving it out to the jeweler just as at present, but in varying weights per dollar, instead of at the arbitrarily fixed weight of 25.8 grains. The weight of gold per dollar in which, at any particular time, gold certificates were redeemable would constitute the virtual and only gold dollar. Under these circumstances it is clear that it would be entirely feasible to change up and down the weight of the gold dollar (that is, the amount of gold bullion interconvertible with a dollar of gold certificates), and without any recoinage or other interference with the outward appearance of the currency in our pockets.

We should familiarize ourselves with another way of stating all this. Instead of saying that the government receives gold bullion at the mint and uses this for redeeming gold certificates, we may, if we prefer, say that the government buys and sells gold. It buys gold from the miner, paying for it in gold certificates; it sells gold to the jeweler, who redeems these certificates. At present, the price at which gold is bought and sold by the government is \$18.60 an ounce (for standard gold nine tenths fine). This is easily figured out from the weight of the gold dollar; for 25.8 grains of gold being our present dollar, each ounce (or 480 grains) of gold bullion contains $480/25.8$ or 18.60 virtual dollars. To say, then, that we now have a fixed weight in our gold dollar, 25.8 grains, is the same thing as to say that we have a fixed government price for gold, \$18.60 per ounce. To raise the weight

of the gold dollar 1 per cent, or from 25.8 grains to 26.058 grains, is the same thing as to lower the government price of gold from \$18.60 to \$18.42 per ounce.

We come now to the second question: How would it be possible to know the proper adjustments to be made in the weight of the virtual dollar—the gold bullion interconvertible with each dollar of gold certificates—without putting a dangerous power of discretion in the hands of government officials? In other words, how can the adjustment in the weight of the virtual dollar be made automatic? The answer is: By means of statistics called “index numbers of prices.” Such statistics are today published by the London *Economist*, the United States Bureau of Labor, the Canadian Department of Labour, and several commercial agencies, such as Bradstreet. The index number of the Bureau of Labor is based on the wholesale prices of 257 commodities, and shows from year to year the extent to which prices on the whole advance or fall,—the *average* movement of all the 257 prices.

There are various systems of index numbers, but they practically all agree remarkably well with each other. When once a system of index numbers is decided upon, their numerical calculation becomes a purely clerical matter. A statistical bureau (as for instance the present Bureau of Labor or an international statistical office) would compile and publish these statistics periodically and the actual prices on which they were based. If at any time the official index number showed that the price level had risen 1 per cent above par, this would be the signal for an increase of 1 per cent in the virtual dollar.

The plan, then, is: first, to provide for the calculation of an official index number of prices; second, to adjust correspondingly the official weight of the virtual dollar at which the government shall issue gold certificates to miners or redeem them for jewelers, in other words, to adjust the official prices of gold at which the government stands ready to buy or sell at the option of the public.

This, then, is the plan in brief—a plan virtually to mark up or down the weight of the dollar (that is, to mark down or up the price of gold bullion) in exact proportion to the deviations above or below par of the index number of prices.

A few additional details essential to the working of the plan may now be briefly mentioned. You are still waiting to see how actual gold coin could be used in such a system. To be continually

recoining the gold in circulation would, of course, be quite impracticable. But this would be unnecessary. Existing gold coin would remain unchanged at 25.8 grains per dollar, and new gold coins would be given the same weight. Gold coins would simply become what the silver dollar now is, token coins. Or, better, they would be, like the gold certificates, mere warehouse receipts, or, as it were, "brass checks" for gold bullion on deposit in the Treasury. Otherwise expressed, *gold coin would be merely gold certificates printed on gold instead of on paper*. They would be used exactly as gold certificates are used—namely, issuable to the gold miner in return for his bullion, and redeemable for those who wished bullion for export or in the arts.

The excess of bullion over the weight of the coined dollar itself would be analogous to what has generally been called "seigniorage;" so that in a sense, the plan may be described as a plan to restore the ancient custom of seigniorage on gold coin. Thus, if the virtual dollar were at any time 35.8 grains, the excess of ten grains above the weight of the coin dollar, 25.8 grains, would be "seigniorage." The gold miner, in return for every 35.8 grains of standard gold bullion taken to the mint, would receive, at his option, a gold certificate on paper, or a gold certificate on gold (*that is, a dollar gold coin*)—the latter containing, just as at present, 25.8 grains. Any holder of gold coin, old or new, and any holder of gold certificates could receive from the government gold bullion at the official rate declared from time to time. He would thus be receiving a larger quantity of gold bullion than the amount of bullion in the gold dollar. The gold coin would then, like all our other coins, be worth more as coin than as bullion, and its value would be determined just as the value of a gold certificate or any other paper money is today determined, by the ultimate bullion with which it would be interconvertible, this bullion being of greater weight than the weight of the dollar itself.

The only real complication which would be introduced by allowing gold coin to remain at its present weight and fineness would be to limit the operation of the system when prices tended to fall below the par or starting point at which the system began. The weight of the virtual gold dollar could never be reduced below the weight of the coin dollar; for, if this were done, the seigniorage would become a minus quantity and all the gold coin would be immediately melted into bullion, being worth more melted than coined. One proviso, therefore, in the system would be that the

weight of the virtual dollar should never be *less* than 25.8 grains and that therefore the government price of gold should never be *more* than \$18.60 per ounce. Perhaps, in view of the present dissatisfaction with high prices, many people would not object to this limitation which permits prices to fall below the present level, but does not permit them to rise further. Yet it is a poor rule that will not work both ways. Consequently, while I personally look forward to an upward tendency of prices in the future, the possibility of a downward movement should be provided for. For this purpose, gold coin could, if desired, be recalled at the outset and recoined in lighter weight, just as the Philippine peso was recalled and reduced in weight when the recent rise in the price of silver threatened to lead to melting the silver pesos. But I do not advocate crossing the bridge until we come to it. It would be sufficient to provide in advance for crossing it in case we should ever come to it. This could be done in one of two ways. It could be provided that, if ever the price level should, in the future, sink more than, say, 10 per cent below the original par or price level from which the system started, all gold coins should then be withdrawn from circulation and gold certificates employed instead. In this way we should be rid of any complication from the use of gold coin, and would be at liberty forever after to adjust the weight of the virtual dollar downward as well as upward. Or, if preferred, it could be arranged that when prices should sink more than the suggested limit of 10 per cent below the original level, we should then recoin and reduce our gold coins. This would merely mean that the gold on which we print our gold certificates would be reduced in weight. It would not, of course, reduce the value of the gold coin any more than the reduction in the weight of the Philippine peso which was made for a similar contingency—or, to take an example nearer home, the reduction of 10 per cent in the weight of our subsidiary silver coins half a century ago—had any tendency to reduce the value of these coins.

If the latter plan were chosen, the amount of reduction in the gold coin should be enough to provide a comfortable margin for any similar emergencies in the future. Any subsequent recoinages would thus be deferred a long time and similar provision for them could be made. Personally, I should prefer the former method, eliminating gold coins altogether.

Another essential detail is a proviso to avoid speculation in gold

disastrous to the government. This would be accomplished by means of a slight government charge, say 1 per cent for minting. This charge, which existed in former days, is called brassage. It would mean that the price at any particular date at which the government bought gold would be slightly less than the price at which it sold it. Without such a margin to protect the government, it is evident that when the government raised its price, say from \$18 to \$18.10 an ounce, speculators might, in anticipation of this rise, buy all the gold in the government vaults at \$18 in order to sell it back to the government immediately after the change in price, at \$18.10, thus profiting ten cents per ounce at the expense of the government.

Similarly, a fall in price, say from \$18.10 to \$18 per ounce, would encourage the opposite form of speculation. Holders of bullion would then rush it to the government to sell it at the present rate of \$18.10, and immediately after the change in price, buy it back at \$18, thus profiting again ten cents per ounce at the expense of the government. If, however, the government were protected by a brassage charge of 1 per cent and if it were provided that no single shift in the government pair of prices, whether they were both moved up or both moved down, should exceed the "brassage" or margin between them, it is clear that no such speculation could occur, for there would be a greater loss from the payments of brassage to the government than any speculative gain possible from the change in price.

Other details relate to the provisions for establishing and maintaining a gold reserve at the outset where no such reserve existed in the first place. In the United States we could utilize the 50,000,000 ounces of gold already in the Treasury for the very purpose of redeeming the \$900,000,000 of gold certificates outstanding.

Time is lacking for any discussion of the numerous supposed objections to the plan and of the exact way in which it would work.

My colleague, President Hadley of Yale, unreservedly endorses the plan, as do most other economists. A number of financial journals, a number of presidents of banks, business statisticians and men in high positions throughout the world have done the same.

Besides these allies, there is another and more powerful ally to help any logical argument for standardizing the dollar, and that

is the grim and constant rise in the cost of living. It must be clear that our present gold standard, so called—a standard really of weight and not of value—has wrought untold mischief. For a quarter of a century—from 1873 to 1896—the dollar increased in purchasing power and caused a prolonged depression of trade, culminating in the political upheaval which led to the free silver campaign of 1896, when the remedy proposed was worse than the disease. We have since then had a reverse movement, and the growing clamor of discontent is daily adding to the ranks of the socialists, also ready with quack remedies. Unless a really scientific remedy is enacted, society will be imperiled by those who, while feeling the pinch from changes in monetary standards, do not recognize the cause.

A laboring man who put \$100 in the savings bank fifteen years ago and now withdraws his \$150, fondly imagines that he has 50 per cent more than he put in. But when he comes to spend it he finds that his whole \$150 will buy no more than his original \$100 would have bought in 1896. In other words, the depreciation of gold has tricked him out of all his interest. Naturally he is discontented, and wants to attack something, he does not much care what. He is one of millions of victims of a shrinking dollar, just as twenty years ago his father may have been one of the millions of victims of an appreciating dollar.

Instead of a standard which first benefits the creditor at the expense of the debtor, and then benefits the debtor at the expense of the creditor, let us have a system which gives a square deal to all.

We have standardized every other unit in commerce except the most important and universal unit of all, the unit of purchasing power. What business man would consent for a moment to make a contract in terms of yards of cloth or tons of coal, and leave the size of the yard or the ton to chance? Once the yard was the girth of a man. In order to make it constant, we have standardized it. We have standardized even our new units of electricity, the ohm, the kilowatt, the ampere, and the volt. But the dollar is still left to the chances of gold mining. At first we could not standardize units of electricity because we had no adequate instruments for measuring those elusive magnitudes. But as soon as such measuring devices were invented, these units were standardized. We have hitherto had a similar excuse for not standardizing the dollar as a unit of purchasing power, and so a standard

for deferred payments; we had no instrument for measuring it or device for putting the results in practice. With the development of index numbers, however, and the device of adjusting the seigniorage according to those index numbers, we now have at hand all the materials for scientifically standardizing the dollar and for realizing the long-coveted ideal of a "multiple standard" of value. In this way it is within the power of society, when it chooses, to create a standard monetary yardstick, a stable dollar.